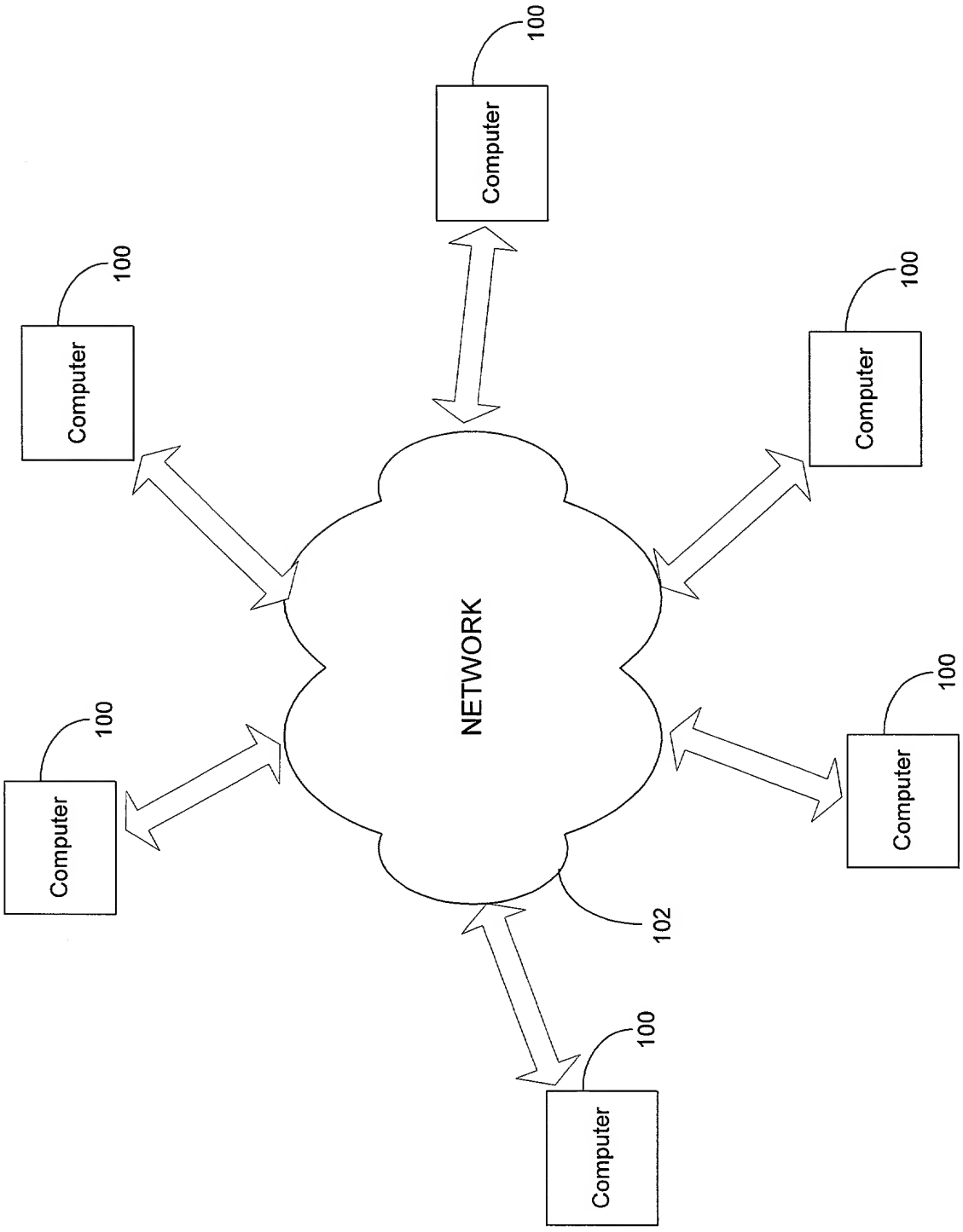


FIG. 1

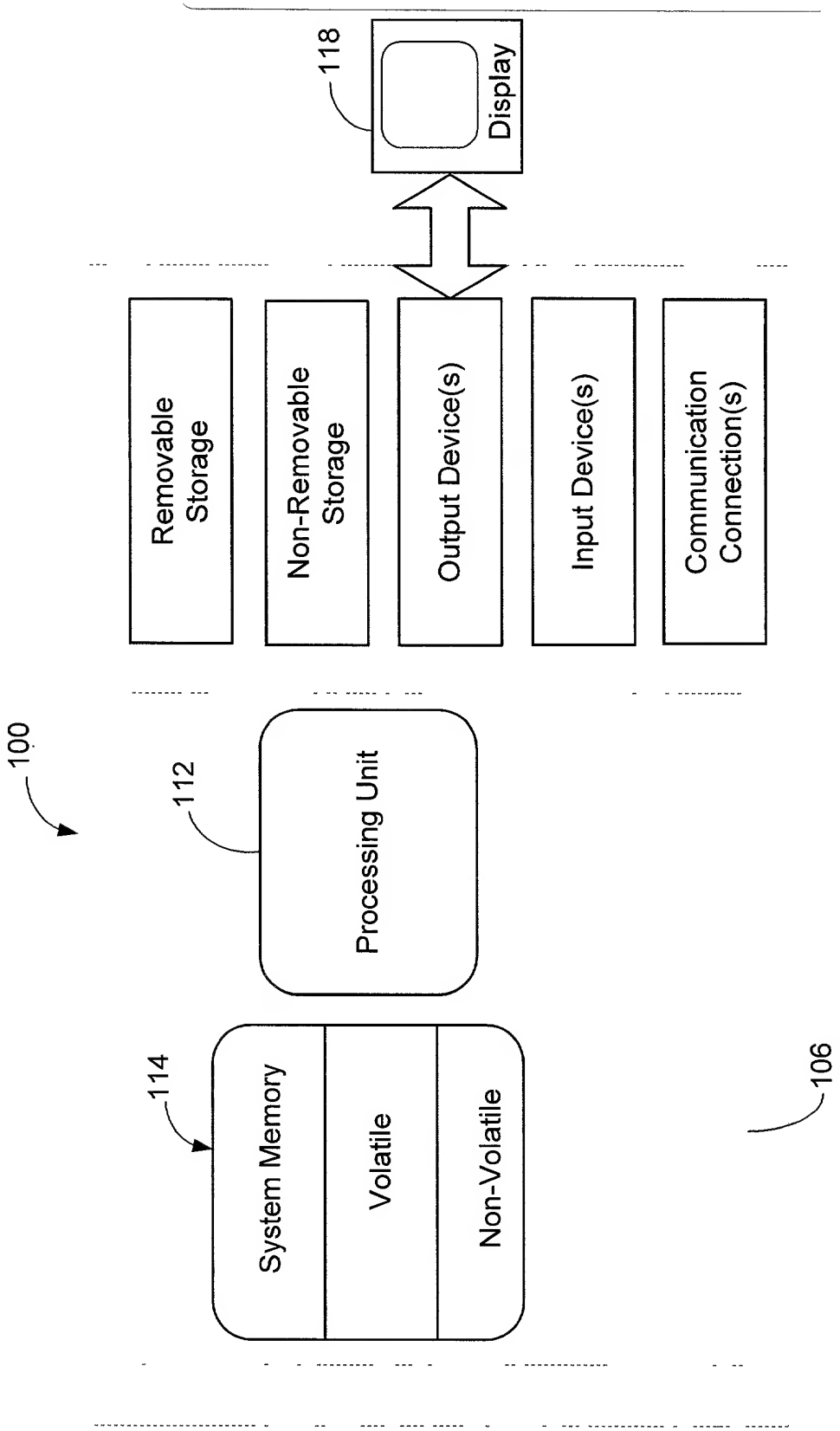

100
112
Processing Unit
114
System Memory
Volatile
Non-Volatile
106
Removable Storage
Non-Removable Storage
Output Device(s)
Input Device(s)
Communication Connection(s)
118
Display

FIG. 2

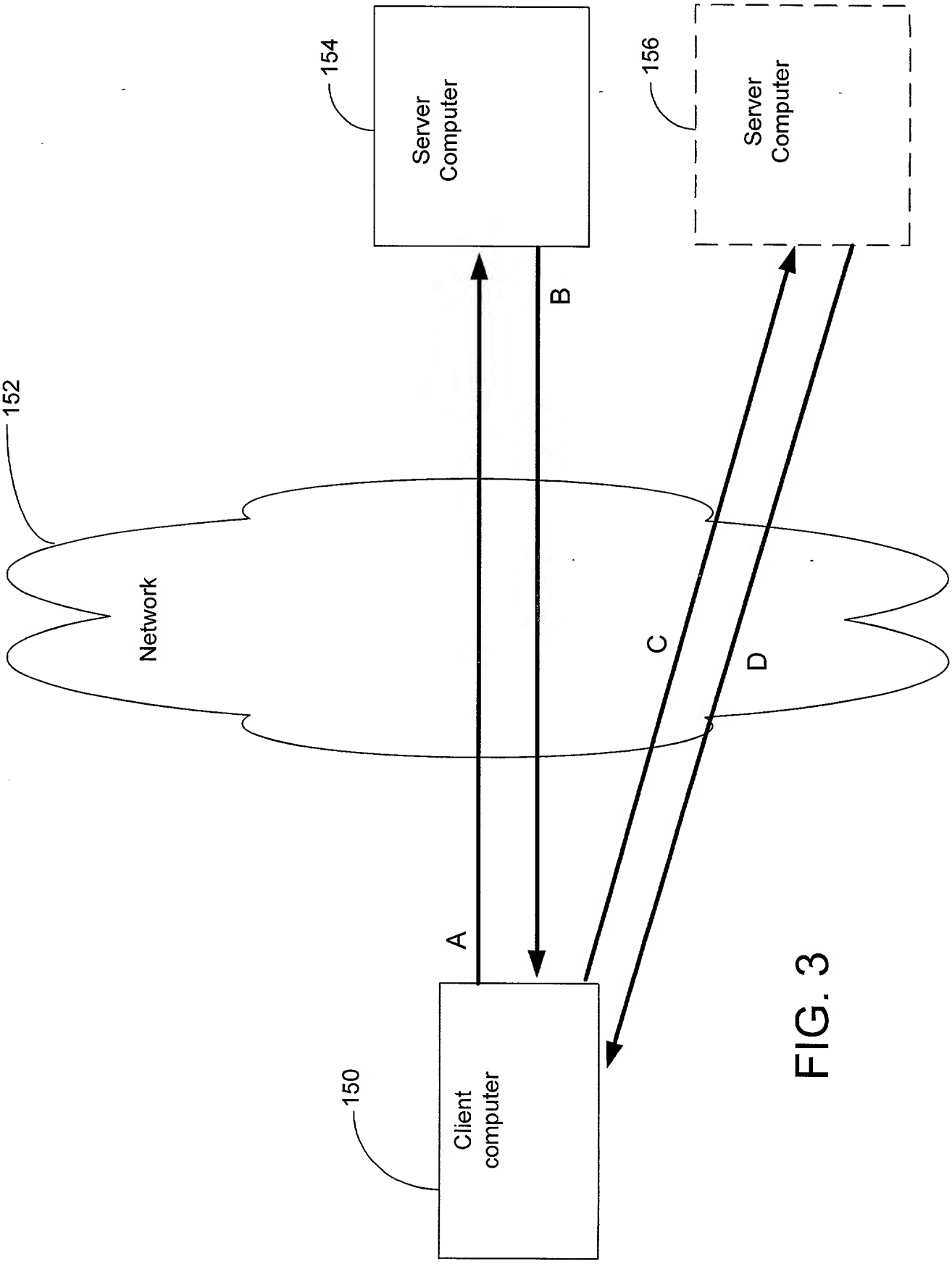

154
Server Computer
156
Server Computer
152
Network
B
C
D
A
150
Client computer

FIG. 3

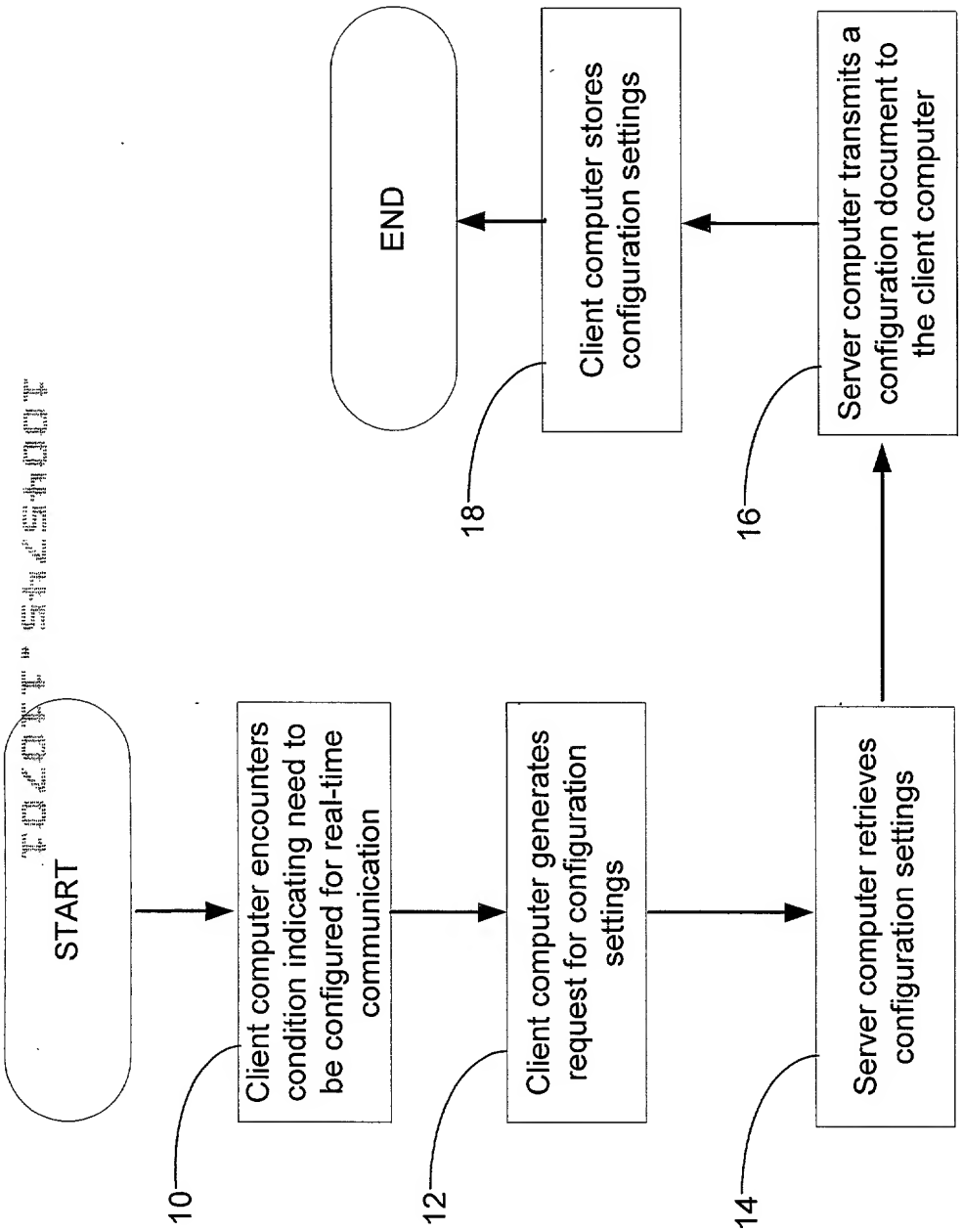
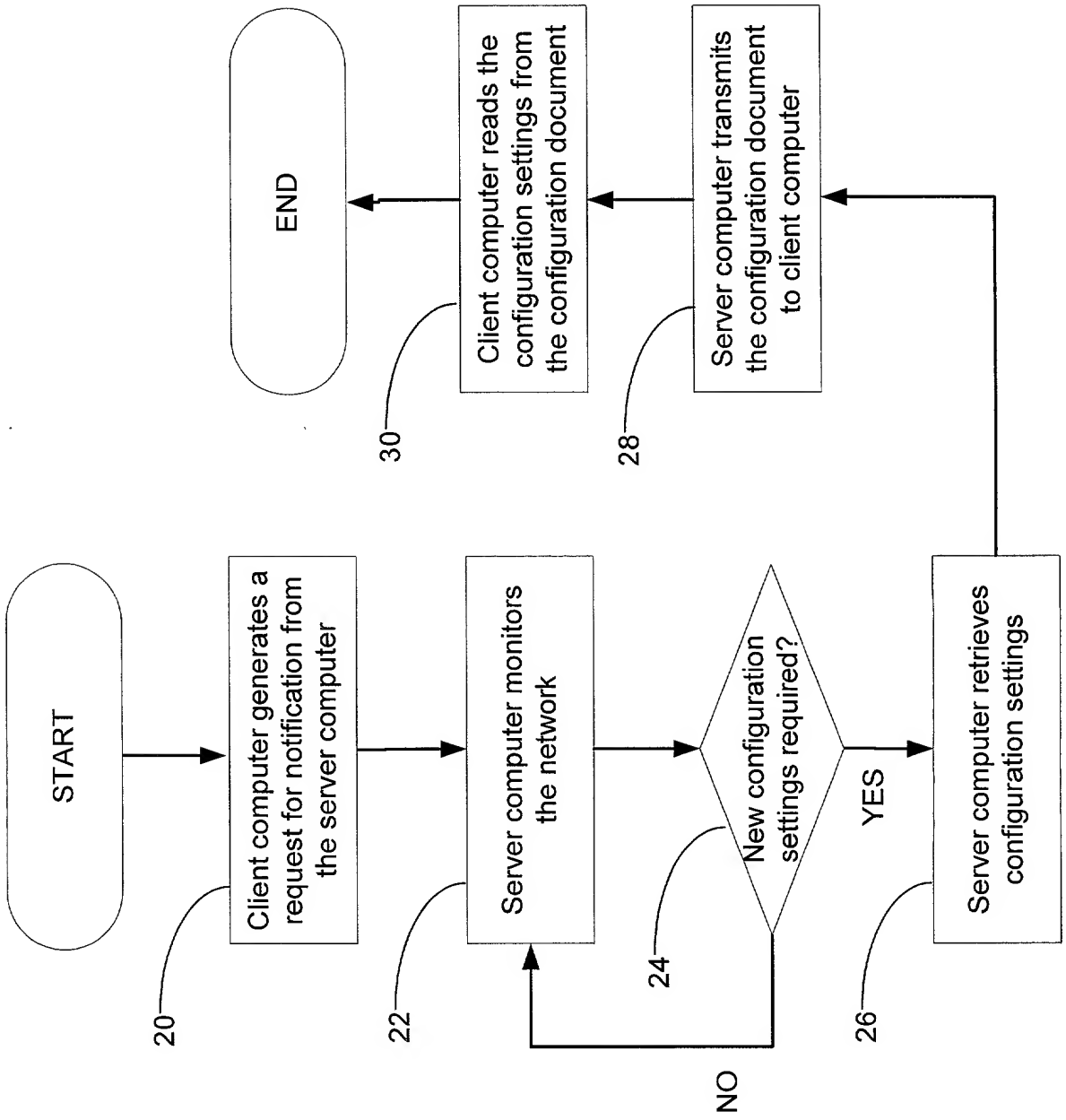

START
Client computer encounters condition indicating need to be configured for real-time communication
Client computer generates request for configuration settings
Server computer retrieves configuration settings
Server computer transmits a configuration document to the client computer
Client computer stores configuration settings
END
10
12
14
16
18

FIG. 4

FIG. 5


START
Client computer generates a request for notification from the server computer
Server computer monitors the network
New configuration settings required?
NO
YES
Server computer retrieves configuration settings
Server computer transmits the configuration document to client computer
Client computer reads the configuration settings from the configuration document
END
20
22
24
26
28
30

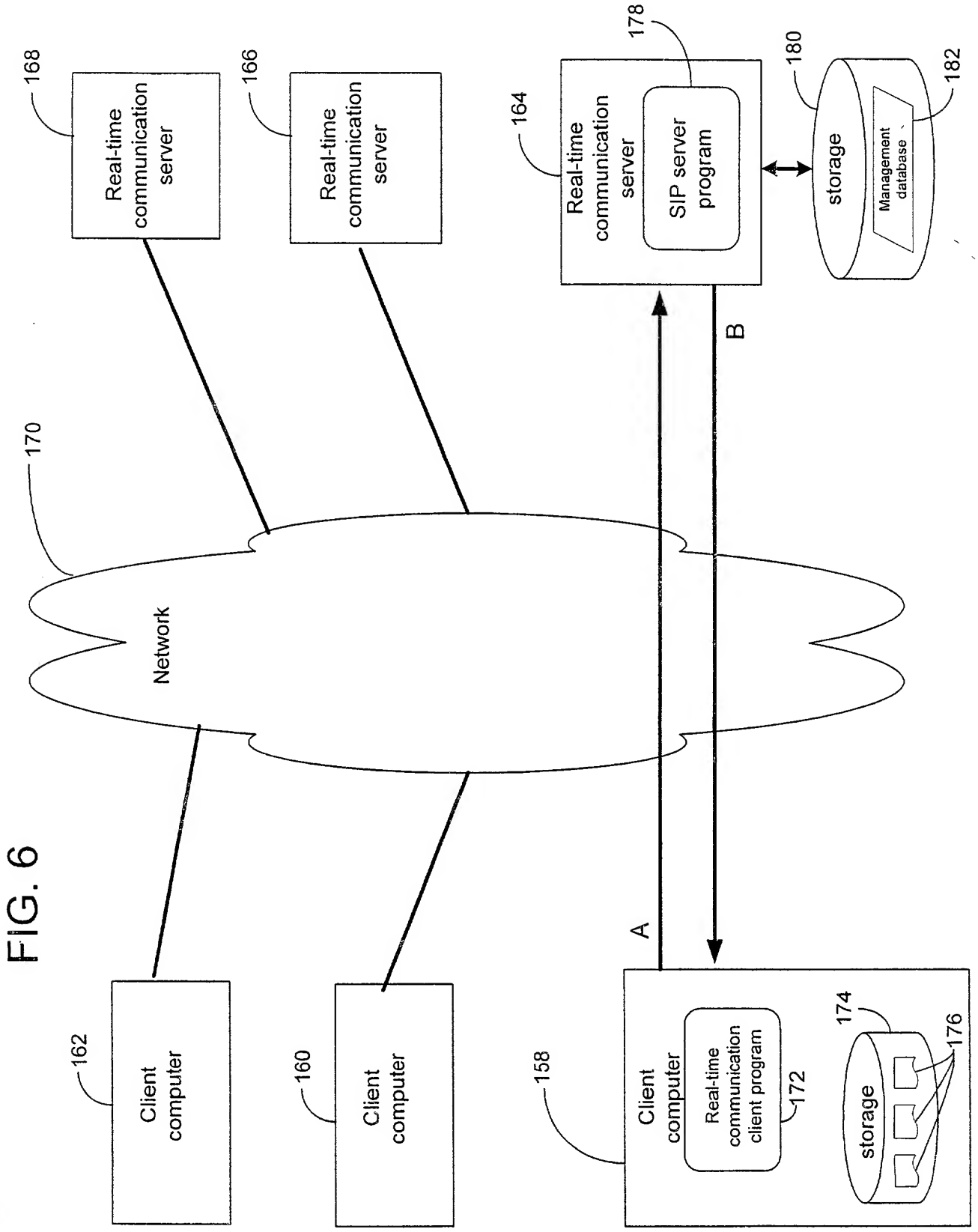

168
Real-time communication server
166
Real-time communication server
164
Real-time communication server
178
SIP server program
180
storage
182
Management database
170
Network
A
B
162
Client computer
160
Client computer
158
Client computer
Real-time communication client program
172
174
storage
176

FIG. 6

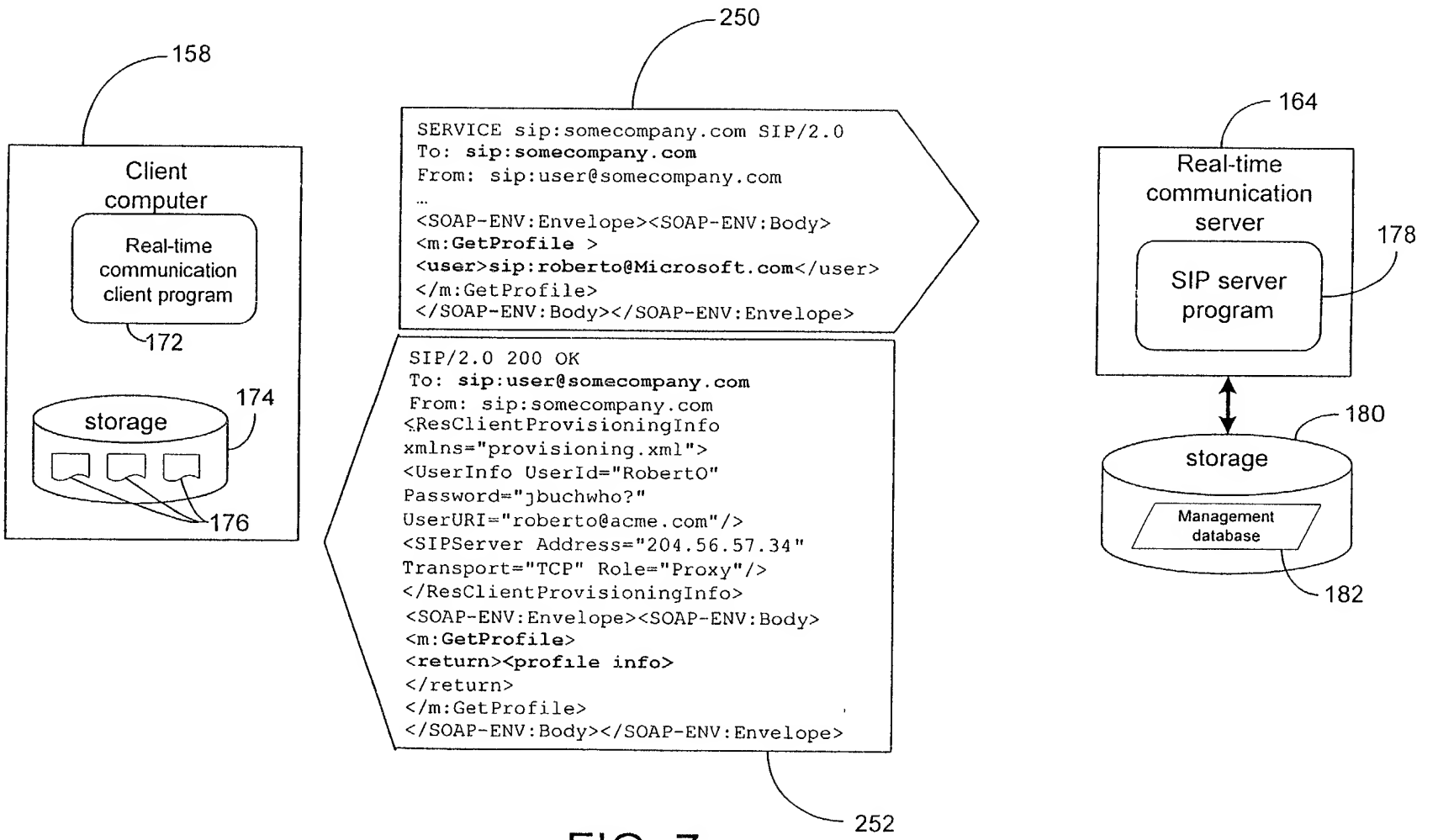

158
Client computer
Real-time communication client program
172
storage
174
176
250
SERVICE sip:somecompany.com SIP/2.0
To: sip:somecompany.com
From: sip:user@somecompany.com
...
<SOAP-ENV:Envelope><SOAP-ENV:Body>
<m:GetProfile >
<user>sip:roberto@Microsoft.com</user>
</m:GetProfile>
</SOAP-ENV:Body></SOAP-ENV:Envelope>
SIP/2.0 200 OK
To: sip:user@somecompany.com
From: sip:somecompany.com
<ResClientProvisioningInfo
xmlns="provisioning.xml">
<UserInfo UserId="RobertO"
Password="jbuchwho?"
UserURI="roberto@acme.com"/>
<SIPServer Address="204.56.57.34"
Transport="TCP" Role="Proxy"/>
</ResClientProvisioningInfo>
<SOAP-ENV:Envelope><SOAP-ENV:Body>
<m:GetProfile>
<return><profile info>
</return>
</m:GetProfile>
</SOAP-ENV:Body></SOAP-ENV:Envelope>
252
164
Real-time communication server
178
SIP server program
180
storage
Management database
182

FIG. 7

Document Shadow

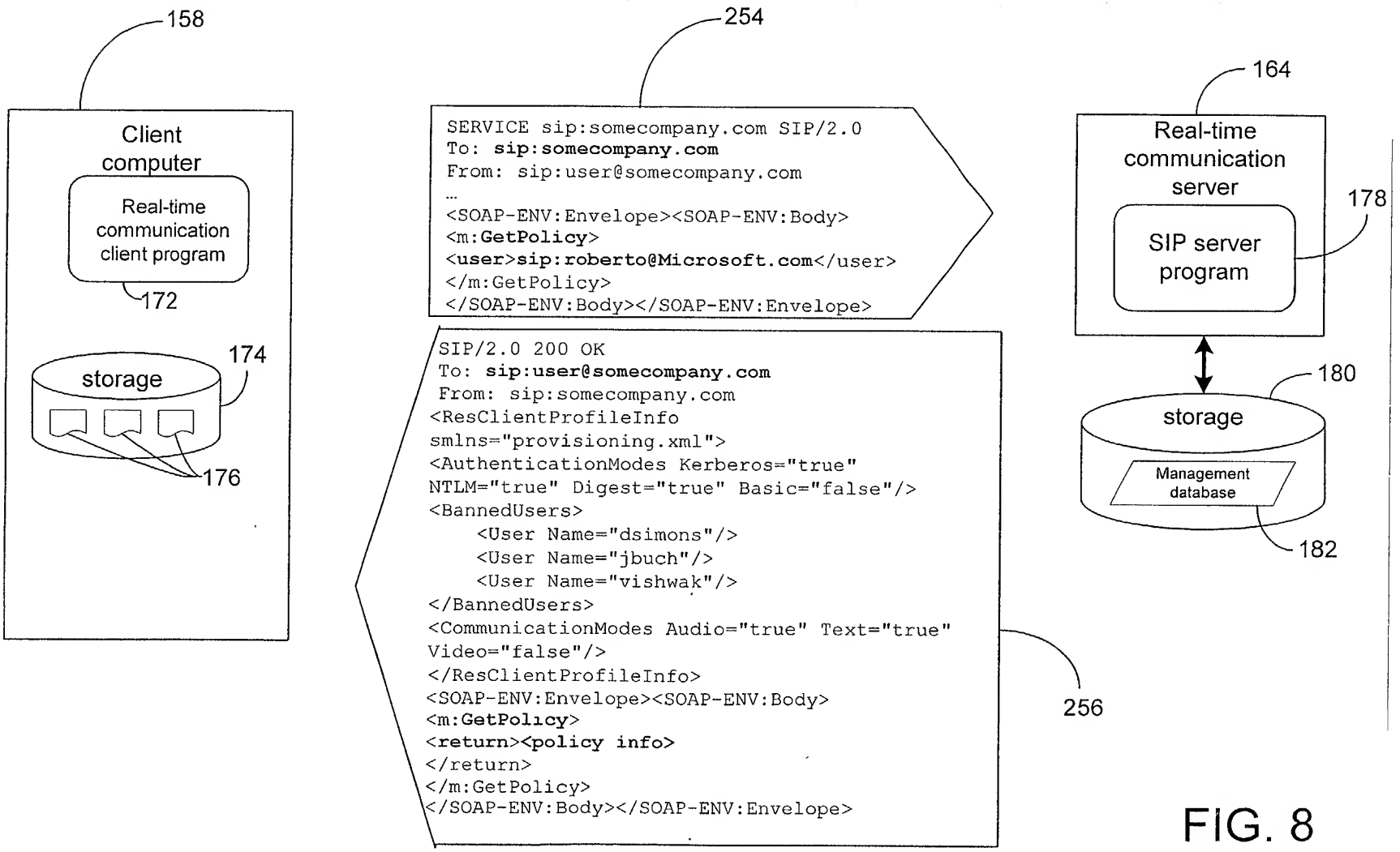


FIG. 8

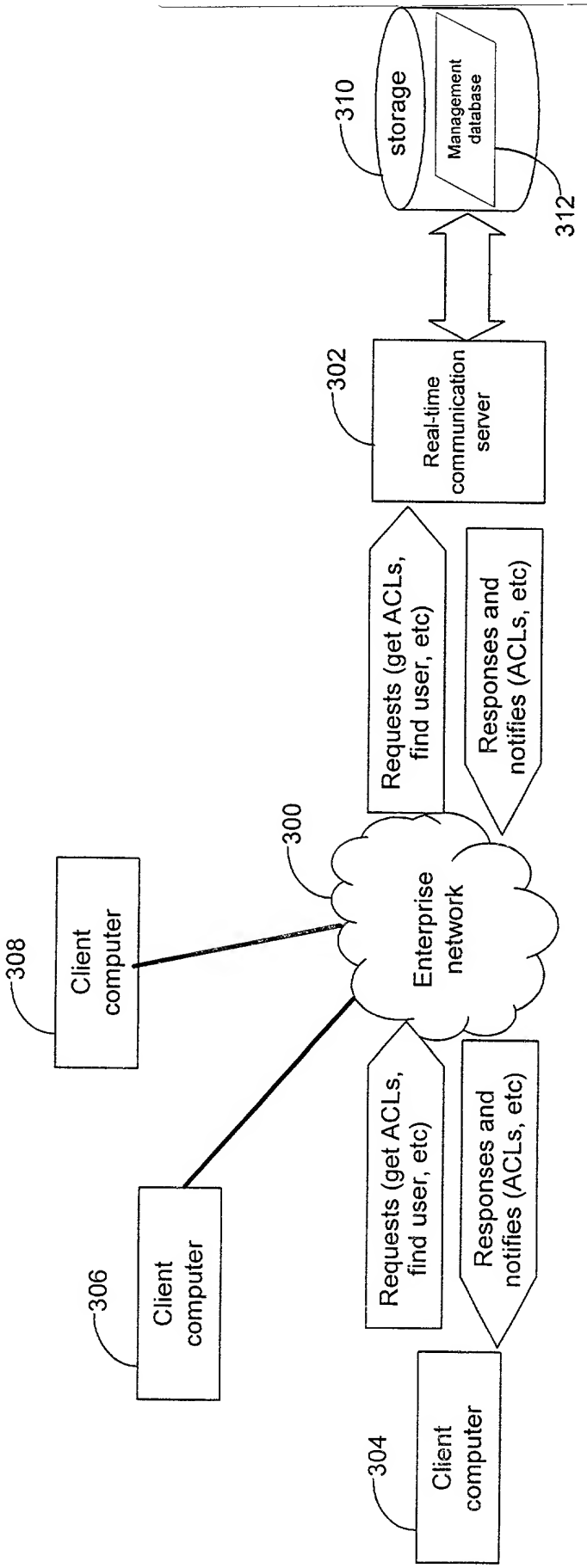

storage
Management database
310
312
Real-time communication server
302
Requests (get ACLs, find user, etc)
Responses and notifies (ACLs, etc)
Enterprise network
300
Client computer
308
Client computer
306
Client computer
304
Requests (get ACLs, find user, etc)
Responses and notifies (ACLs, etc)

FIG. 9

Toxot Shoot

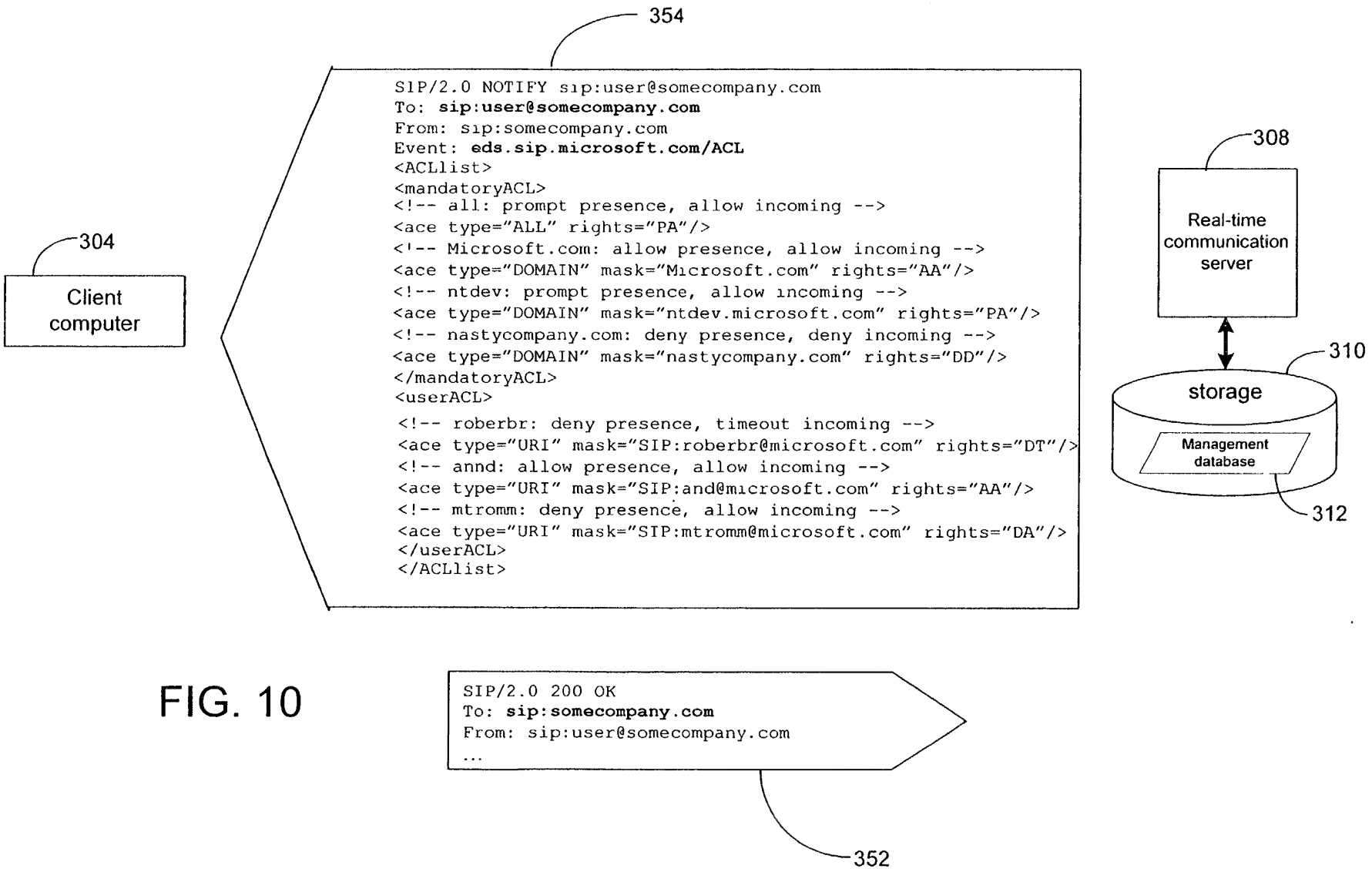


FIG. 10

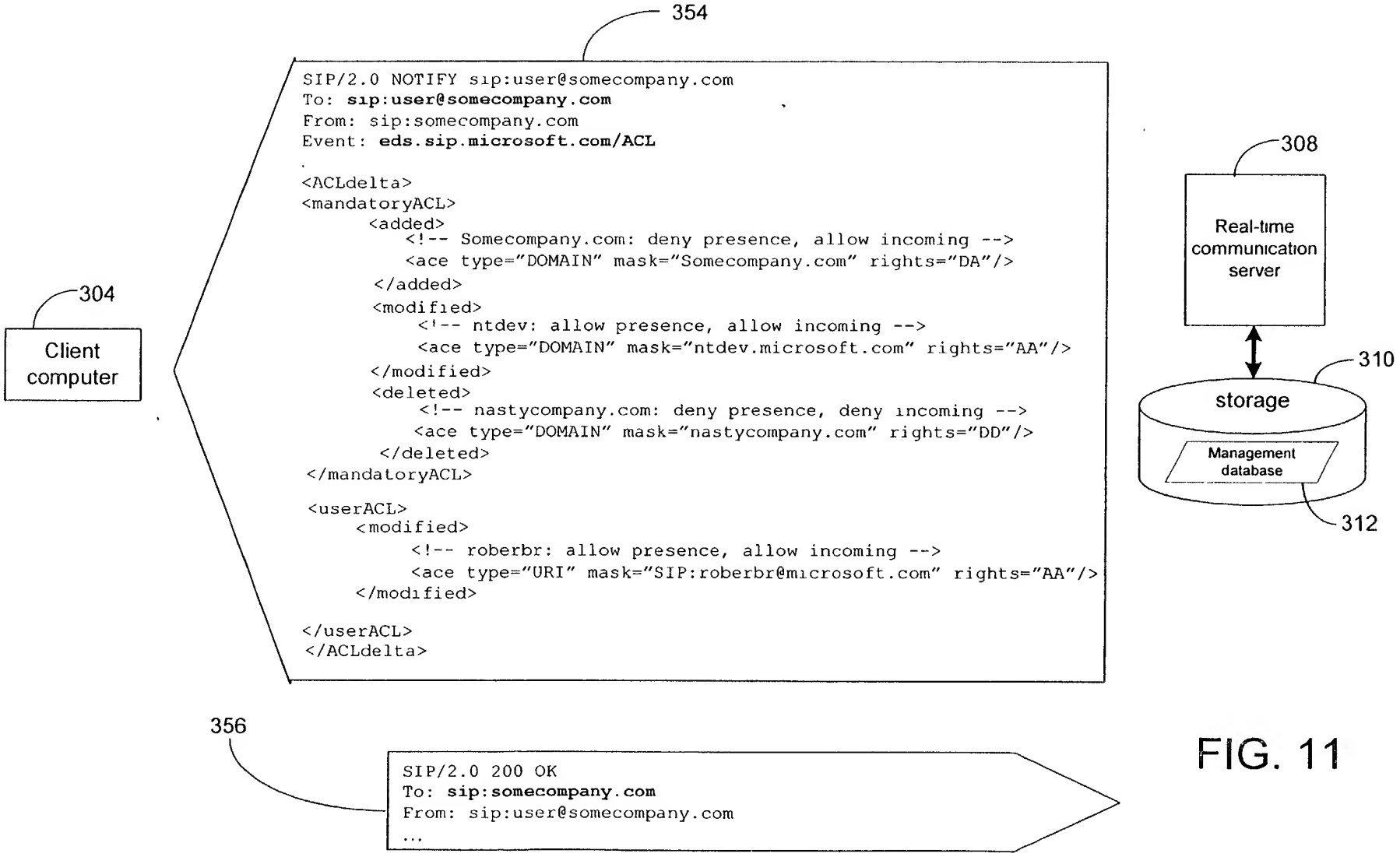

354
SIP/2.0 NOTIFY sip:user@somecompany.com
To: sip:user@somecompany.com
From: sip:somecompany.com
Event: eds.sip.microsoft.com/ACL
<ACLdelta>
<mandatoryACL>
<added>
<!-- Somecompany.com: deny presence, allow incoming -->
<ace type="DOMAIN" mask="Somecompany.com" rights="DA"/>
</added>
<modified>
<!-- ntdev: allow presence, allow incoming -->
<ace type="DOMAIN" mask="ntdev.microsoft.com" rights="AA"/>
</modified>
<deleted>
<!-- nastycompany.com: deny presence, deny incoming -->
<ace type="DOMAIN" mask="nastycompany.com" rights="DD"/>
</deleted>
</mandatoryACL>
<userACL>
<modified>
<!-- roberbr: allow presence, allow incoming -->
<ace type="URI" mask="SIP:roberbr@microsoft.com" rights="AA"/>
</modified>
</userACL>
</ACLdelta>
304
Client computer
308
Real-time communication server
310
storage
Management database
312
356
SIP/2.0 200 OK
To: sip:somecompany.com
From: sip:user@somecompany.com
...

FIG. 11